SBR No. 46/17-18
DATED 26-7-17

No. 1st & Final Bill

Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

(For Other Works)

EE/ELE/Y/BR No. 46/17-18 Date.....2010

Division: **Electricals (Yelahanka)** Sub-Division: **Electricals** Dt. 26-7-17

Bill Received No. Dated Divisional Cash Book Voucher No..... Dated.....

Sub Divisional **Job Code :-008-17-000052**

Schedule Docket No. Head of Account : P 3110 D.R.No. :

Name of Work : *Providing and Fixing of LED Street Lights Ward No-08 in Byatarayanapura Division.*

Name of Contractor and Full Address: **M/S. Sri Lakshmi narasimha Electrical**

Reference to Agreement No: EE/Ele/YZ/WO/ 34 /17-18 Date: 15/07/2017

Certified that the measurements were taken by me on 26/7/17 and recorded of Pages 3219 to 228 of measurement Book No. 313 and that the work is satisfactorily executed.

Contractor **Officer-in-charge of work**

Certified that the measurement were taken by me on 26/7/17 ....and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Sub-Division Officer

Assistant Executive Engineer (Ele)

II Memorandum of Payment

1) Total value of work done or supplies made as per account within	Bill	852364=00
2) Deduct amount to be held in reserve being .....percent Rs.....		
3) " Balance		
4) Deduct Payment:		
a) Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... Amount adjusted towards cash advance recovery of	IT 1%	8524=00
	LWC 1%	8524=00
	GBF 0.1%	852=00
	deductions	17900=00
b) Payments Now made { cost store or other material supplied. recovery of amount creditable to this/other work Amount paid on this bill Cheque / Cash.	Cheque	834464=00
5) Balance being unpaid value of work done held in reserve.		
6) Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.		
7) Net amount due to or from Contractor unadjustments items.		
8) Advance to Contractor for materials brought to site (as detailed) within.		
9) Value of Government materials supplied.		
Total amount adjusted -		

Contractor's Signature

Received Rs..... (in words).....

.....

by cash and by adjustment of Payment as per memorandum

(in final settlement of all demands) (For use in the Office)

Witness

1.

2.

Dated Signature of Contractor

Paid by me by Cheque No.....Dated.....

Cash Rs.....

Dated.....

Initials of Officer making payment

Stamp

ಲೆಕ್ಕಶೀರ್ಷಿಕೆ P 3110 14th Finance

ರೂ: 852364=00 ಬಿಡಿಟ್ ಮಾಡಿ ಸ್ವೀಕರಿಸಿದೆ

ರೂ: 834464=00 ಚೆಕ್ ನೀಡಬಹುದಾಗಿದೆ

ರೂ: 17,900=00 ಹೊಂದಾಣಿಕೆ ಮಾಡಿದೆ

Executive Engineer

ಲೆಕ್ಕ ಅಧೀಕ್ಷಕರು ಕಾ.ಪಾ.ಅ.(ವಿ) ಯಲಹಂಕ ವಲಯ

Sl. No	Description of Item	Unit
	Name Of Work:- Providing and Fixing of LED Street Lights Ward No-08 in Byatarayanapura Division.	
1	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part LED Streetlight 65watts	Nos
2	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs. 50000 hr. @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4 KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI 75+. housing with supplier word mark / name shall be engraved / Embossing on the die cast housing / body part. . Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacturer. Suitable for A1/A2 Roads as per IS 1944 Part I & Part II.90 Watts	Nos
3	Fabricating, supplying and erection of ...Mtrs long hot dip Galvanized Conical pole with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick, suitable base plate and 4Nos of ..... long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc.,(excluding foundation) as per drawing appended.7 meters - Top 75mm and bottom 145 mm dia	Nos
4	Supplying, and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete.Single Arm Bracket with 1000mm Standard 40/50MM dia	Nos
5	Double Arm Bracket with 1000mm Standard 40/50MM dia	Nos

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		22	13500.00	297000.00	22	297000.00	
		19	16500.00	313500.00	19	313500.00	
		13	9000.00	117000.00	13	117000.00	
		7	400.00	2800.00	7	2800.00	
		6	600.00	3600.00	6	3600.00	

6	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded Aluminium unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm.	Each
7	Supplying of 1.1kv grade Aerial Bunched cable stranded & compacted Aluminium Phase conductor and Stranded Messenger conductor with all aluminium alloy, Phase conductor is insulated with XLPE compound insulated Messenger with specified IS - 14255:1995 & confirming to GTP of group A. 3X16 + 1X25 + 1X16 sqmm	Per Mtr
8	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	Per Mtr
9	Piercing connector suitable for 16 sqmm - 95 sqmm AB cable -steel light connection. Bescom SR of 2010-11, Page no 16 of 34, Serial no 51.12.	Nos
10	Suspension clamp assembly 25 to 95 sqmm bare messenger. Bescom SR of 2010-11, Page no 16 of 34, Sl no 51.17.	Nos
11	Dead end clamp / Anchor clamp assembly 25 to 95 sqmm bare messenger, Bescom SR of 2010-11, Page no 16 o 34, Sl no 51.16.	Nos
12	Erection of Suspension Clamp - 25 to 95 sqmm bare messenger. Bescom SR of 2010-11, Page No 21 of 27, Sl No 26.6.	Nos
13	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable. 4 core 16 sqmm	Per Mtr
14	Labour charges for lying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct.b)25sqmm to 75 sqmm	Per Mtr
15	Digging of trench of 0.6 m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc.,complete. (As perCivil SR KSRB I-2, P-7).a) Asphalt cutting	Per Mtr
16	Supplying and Fixing ..... including all Hardware's etc. complete as per the standard technical specification of BESCOM. RCC Clamp	Nos
17	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.5 32Amps SP	Nos
18	Supplying and fixing electro mechanical timer (without contactor) using necessary bolts, nuts and washers etc.. Group A, PWD SR 2006-07,	Nos
19	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	Nos
20	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and Copper conductor single core cable in open or consealed system of wiring.I Group A Materials.a)1 sqmm.	Mtrs
21	Supplying and fixing phylum brand hand plastic sheet 3mm thick with necessary niches for fixing switches, regulators etc., and fixing on exisiting wood or metal box using N.F.screws	Sqcms
22	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)40X40X6mm	Mtrs

		235	5.00	1175.00	235 250	1175 1250.00	
		250	80.00	20000.00	250	20000.00	
		250	5.00	1250.00	250	1250.00	
		7	2.00 9.00	1H 63.00	7	1H 63.00	
		7	2.00	14.00	7	14.00	
		2	5.00	10.00	2	10.00	
		7	5.00	35.00	7	35.00	
		225	100.00	22500.00	225	22500.00	
		225	5.00	1125.00	225	1125.00	
		200	50.00	10000.00	200	10000.00	
		7	100.00	700.00	7	700.00	
		10	50.00	500.00	10	500.00	
		5	1500.00	7500.00	5	7500.00	
		5	4500.00	22500.00	5	22500.00	
		200	10.00	2000.00	200	2000.00	
		6750	0.10	675.00	6750	675.00	
		5	53.20	266.00	5	266.00	

23	Supply and Installation / Fixing / Provision of Outdoor type Thermoplastic Modular Panel enclosure with transparent Polycarbonate Lid, shock proof, IP65 (Weather Proof), rust proof, dust proof, water proof, corrosion proof having internally Embedded gasket on both lid and flap suitable to fix Single Phase / Three Phase Energy Meter in suitable base plate and having a provision for Fuse / MCB cutout with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility.300mmx450mmx214mm	Nos
24	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires.Using 32mm dia G.I.pipe	Nos
25	Providing Rcc Pole pedstal of Size 0.5x0.5x1.6 Mtrs Including digging of pit, tor steel, anchoring bolts nuts ,templates ,Centring,1;4;8base concrete,1;2;4pedestal concrete and etc coplete as per the data sheet enclosed	Nos
	Total Rs	

Certificate: 1. Certefied that the Above Work has been carreid out satisfactorily

Assistant Executive Engineer (Ele)
BBMP, Bangalore

		5	3000.00	15000.00	5	15000.00	
		25	320.00	8000.00	25	8000.00	
		13	400.00	5200.00	13	5200.00	
				852413.00		852488.00	

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